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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/729,636

12/04/2003

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SVL920030127US1/2997P

1092

29141 7590 06/05/2007
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EXAMINER

SHIN, KYUNG H

ART UNIT

PAPER NUMBER

2143

MAIL DATE

DELIVERY MODE

06/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/729,636	Applicant(s) BIRD ET AL.	
	Examiner Kyung H. Shin	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/4/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responding to application papers filed on **12-4-2003**.
2. Claims **1 - 28** are pending. Claims **1, 8, 15, 22** are independent.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **1, 2, 4 - 16, 18 - 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Oulid-Aissa** (US Patent No. **5,835,757**) in view of **Lomet et al.** (US Patent No. **6,182,086**).

Regarding Claims 1, 15, Oulid-Aissa discloses a method, a computer readable medium with program instruction for avoiding section collision for application server requests over a single database connection, the method comprising:

receiving a statement assigned a command source identifier by a database server from an application source over a single database connection between the database server and an application server, and receiving a second statement assigned a command source identifier by the database server from an application source over the single database connection, wherein the first statement is substantially identical

to the second statement. (see Oulid-Aissa col. 10, lines 12-17: single database connection; col. 10, lines 28-32: application command statement(s); col. 31, lines 15-18: application (command source) identifier) And, Oulid-Aissa discloses wherein executing the first statement assigned a command source identifier separately from and in parallel with the second statement assigned the second command source without section collision. (see Oulid-Aissa col. 10, lines 12-17: single database connection; col. 10, lines 28-32: command (statement) processing; col. 10, lines 49-53; col. 12, lines 32-36: successfully (without collision) parallel processing data update) Oulid-Aissa does not specifically disclose a first command source identifier, and a second command source identifier.

However, Lomet discloses:

- (a) a first command source identifier by a database server from a first application source; (see Lomet col. 5, lines 1-6: request processing; col. 10, lines 19-21; col. 10, lines 25-30: unique application identifier (first, second source identifier))
- (b) a second command source identifier by the database server from a second application source; (see Lomet col. 10, lines 19-21; col. 10, lines 25-30)
- (c) a first command source identifier and the second command source. (see Lomet col. 5, lines 1-6: request processing; col. 10, lines 19-21; col. 10, lines 25-30)

It would have been obvious to one of ordinary skill in the art to modify Oulid-Aissa as taught by Lomet to enable the capability for a first command source identifier, and a second command source identifier. One of ordinary skill in the art would have been motivated to employ the teachings of Lomet in order to enable the

capability to enable capturing client-server interactions to enable recovery of client-side applications following system crashes. (see Lomet col. 4, lines 54-58: “ ... *This invention concerns a client-server computer system having one or more clients connected to one or more servers, and techniques for capturing client-server interactions to enable recovery of client-side applications following system crashes.* ... ”)

Regarding Claims 2, 16, Oulid-Aissa discloses the method, medium of claims 1, 15, wherein the command source identifiers. (see Oulid-Aissa col. 6, lines 6-10: multiple client applications; col. 31, lines 15-18: application (command source) identifier) Oulid-Aissa does not specifically disclose first and second command source identifiers. However, Lomet discloses wherein first and second command source identifiers are assigned by the application server. (see Lomet col. 5, lines 1-6: request processing; col. 10, lines 19-21; col. 10, lines 25-30: unique application identifier (i.e. first, second source identifier))

It would have been obvious to one of ordinary skill in the art to modify Oulid-Aissa as taught by Lomet to enable the capability for first and second command source identifiers assigned by the application server. One of ordinary skill in the art would have been motivated to employ the teachings of Lomet in order to enable the capability to enable capturing client-server interactions to enable recovery of client-side applications following system crashes. (see Lomet col. 4, lines 54-58)

Regarding Claims 4, 18, Oulid-Aissa discloses the method, medium of claims 1, 15, wherein the first statement assigned the first command source identifier and the second statement assigned the second command source identifier is a single statement containing the first and second application sources, wherein a portion of the single statement pertaining to the first application source is assigned the first command source identifier, and wherein a portion of the single statement pertaining to the second application source is assigned the second command source identifier. (see Oulid-Aissa col. 10, lines 28-32: multiple commands within one statement; col. 6, lines 6-10: multiple client applications; col. 31, lines 15-18: application (command source) identifier) Oulid-Aissa does not specifically disclose the first command source identifier and the second command source identifier. However, Lomet discloses wherein the first command source identifier and the second command source identifier. (see Lomet col. 5, lines 1-6: request processing; col. 10, lines 19-21; col. 10, lines 25-30: unique application identifier (i.e. first, second source identifier))

It would have been obvious to one of ordinary skill in the art to modify Oulid-Aissa as taught by Lomet to enable the capability for the first command source identifier and the second command source identifier. One of ordinary skill in the art would have been motivated to employ the teachings of Lomet in order to enable the capability to enable capturing client-server interactions to enable recovery of client-side applications following system crashes. (see Lomet col. 4, lines 54-58)

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Regarding Claims 5, 19, Oulid-Aissa discloses the method, medium of claims 1, 15, wherein the first application source is within a first application and the second application source is within a second application. (see Oulid-Aissa col. 6, lines 6-10: multiple (first, second) client applications)

Regarding Claims 6, 20, Oulid-Aissa discloses the method, medium of claims 1, 15, wherein the first statement assigned the first command source identifier is a statement to open a cursor and wherein the second statement assigned the second command source identifier is a statement to open the same cursor. (see Oulid-Aissa col. 27, lines 48-50: record pointer (cursor) utilized for data processing, object instance; col. 31, lines 15-18: application (source) identifiers; col. 6, lines 6-10: multiple (first, second) client applications) Oulid-Aissa does not disclose the first command source identifier and the second command source identifier. However, Lomet discloses wherein the first command source identifier and the second command source identifier. (see Lomet col. 5, lines 1-6: request processing; col. 10, lines 19-21; col. 10, lines 25-30: unique application identifier (i.e. first, second source identifier))

It would have been obvious to one of ordinary skill in the art to modify Oulid-Aissa as taught by Lomet to enable the capability for the first command source identifier and the second command source identifier. One of ordinary skill in the art would have been motivated to employ the teachings of Lomet in order to enable the capability to enable capturing client-server interactions to enable recovery of client-side applications following system crashes. (see Lomet col. 4, lines 54-58)

Regarding Claims 7, 21, Oulid-Aissa discloses the method, medium of claims 6, 20, wherein the executing (c) comprises:

- (c2) assigning a first query identifier to the first instance of the cursor by the database server; (see Oulid-Aissa col. 27, lines 48-50; col. 13, lines 37-39: record pointer (cursor) data processing, object instance; col. 13, lines 37-39: object (query) identifier)
- (c4) assigning a second query identifier to the second instance of the cursor by the database server; (see Oulid-Aissa col. 27, lines 48-50; col. 13, lines 37-39: record pointer (cursor) processing, object instance (query) identifier)
- (c5) returning the first and second query identifiers to the application server. (see Oulid-Aissa col. 13, lines 37-39: object class (query) identifier)

Oulid-Aissa discloses wherein creating a first instance of the cursor in response to the first statement assigned the command source identifier; (see Oulid-Aissa col. 27, lines 48-50: object instance, record; col. 10, lines 28-32: command processing; col. 31, lines 15-18: application identifier) And, creating a second instance of the cursor in response to the second statement assigned; (see Oulid-Aissa col. 27, lines 48-50; col. 13, lines 37-39: record pointer (cursor) data processing, object instance; col. 6, lines 6-10: multiple client applications) Oulid-Aissa does not specifically disclose a first source identifier and the second command source identifier.

However, Lomet discloses:

(c1) a first source identifier. (see Lomet col. 5, lines 1-6: request processing; col. 10, lines 19-21; col. 10, lines 25-30: unique application identifier (i.e. first, second source identifier))

(c3) the second command source identifier (see Lomet col. 5, lines 1-6: request processing; col. 10, lines 19-21; col. 10, lines 25-30: unique application identifier (i.e. first, second source identifier))

It would have been obvious to one of ordinary skill in the art to modify Oulid-Aissa as taught by Lomet to enable the capability for a first source identifier and the second command source identifier. One of ordinary skill in the art would have been motivated to employ the teachings of Lomet in order to enable the capability to enable capturing client-server interactions to enable recovery of client-side applications following system crashes. (see Lomet col. 4, lines 54-58)

Regarding Claims 8, 22, Oulid-Aissa discloses a method, a computer readable medium with program instructions for avoiding section collision for application server requests over a single database connection, the method comprising:

(a) receiving a first statement to open a cursor by an database server over a single database connection between the database server and an application server;
(see Oulid-Aissa col. 10, lines 28-32: command (statement) processing; col. 27, lines 48-50: record pointer (cursor) data processing)

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- (b) creating a first instance of the cursor in response to the first statement; (see Oulid-Aissa col. 27, lines 48-50: record pointer (cursor), object instance)
- (c) assigning the first instance a first query identifier; (see Oulid-Aissa col. 13, lines 37-39: data processing attached to application identifier)
- (d) receiving a second statement to open the same cursor by the database server over the single database connection before the first instance of the cursor closes; (see Oulid-Aissa col. 10, lines 28-32: command (statement) for data processing; col. 10, lines 12-17: single database connection)
- (e) creating a second instance of the cursor in response to the second statement; (see Oulid-Aissa col. 27, lines 48-50: record pointer (cursor), object instance) and
- (f) assigning the second instance a second query identifier. (see Oulid-Aissa col. 13, lines 37-39: data processing attached to application identifier)

Regarding Claims 9, 23, Oulid-Aissa discloses the method, medium of claims 8, 22, wherein the first and second query identifiers are assigned by the database server. (see Oulid-Aissa col. 13, lines 37-39: object (query) identifier(s))

Regarding Claims 10, 24, Oulid-Aissa discloses the method, medium of claims 8, 22, further comprising: (g) processing the first instance of the cursor separately from and in parallel with the second instance of the cursor. (see Oulid-Aissa col. 27, lines 48-50: record pointer (cursor) data processing; col. 10, lines 49-53; col. 12, lines 32-36: successfully (without collision) parallel processing data update)

Regarding Claims 11, 25, Oulid-Aissa discloses the method, medium of claims 8, 22, further comprising: (g) returning the first and second query identifiers to the application server. (see Oulid-Aissa col. 13, lines 37-39: object (query) identifier(s))

Regarding Claims 12, 26, Oulid-Aissa discloses the method, medium of claims 11, 26, wherein subsequent statements received by the database server for the first instance of the cursor comprises the first query identifier. (see Oulid-Aissa col. 10, lines 28-32: command (statement) processing)

Regarding Claims 13, 27, Oulid-Aissa discloses the method, medium of claims 11, 25, wherein subsequent statements received by the database server for the second instance of the cursor comprises the second query identifier. (see Oulid-Aissa col. 27, lines 48-50; col. 13, lines 37-39: record (cursor), instance data processing)

Regarding Claims 14, 28, Oulid-Aissa discloses the method, medium of claims 8, 22, wherein the first statement is from a application source and is assigned a command source identifier, wherein the statement is from a application source and is assigned a command source identifier. (see Oulid-Aissa col. 10, lines 28-32: command (statement) processing; col. 31, lines 15-18: application (command source) identifier) Oulid-Aissa does not specifically disclose a first command source identifier, and a second command source identifier. However, Lomet discloses wherein a first command source identifier,

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and a second command source identifier. (see Lomet col. 5, lines 1-6: request processing; col. 10, lines 19-21; col. 10, lines 25-30: unique application (first, second command source) identifier)

It would have been obvious to one of ordinary skill in the art to modify Oulid-Aissa as taught by Lomet to enable the capability for a first command source identifier and a second command source identifier. One of ordinary skill in the art would have been motivated to employ the teachings of Lomet in order to enable the capability to enable capturing client-server interactions to enable recovery of client-side applications following system crashes. (see Lomet col. 4, lines 54-58)

5. Claims **3, 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Oulid-Aissa-Lomet** and further in view of **Kavner et al.** (US Patent No. **6,430,607**).

Regarding Claims 3, 17, Oulid-Aissa discloses the method, medium of claims 1, 15. (see Oulid-Aissa col. 6, lines 6-10: client application(s), request processing; col. 31, lines 15-18: application (command source) identifiers) Oulid-Aissa does not specifically disclose the first application source and the second application source are different application sources within a same application. However, Kavner discloses wherein the first application source and the second application source are different application sources within a same application. (see Kavner col. 4, lines 5-11: multiple requests, single client application)

It would have been obvious to one of ordinary skill in the art to modify Oulid-Aissa as taught by Kavner whereby the first application source and the second application source are different application sources within a same application. One of ordinary skill in the art would have been motivated to employ the teachings of Kavner in order to enable the capability to perform other tasks while waiting for a response to request. (see Kavner col. 2, lines 33-39: "*... As explained above, conventional remote procedure calls do not return control to the application program until the server has completed a request. Consequently, the client application suspends operations until it receives a response from the server. This may result in substantial delays, ...*"; col. 2, lines 42-44: "*... As a result, the client application wastes processor cycles while waiting for a response from the server....*"; col. 3, line 66 - col. 4, line 1: "*... Returning operating control to the client before receiving a response from the server, allows the client to perform other tasks while waiting for the response. ...*")

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung H. Shin whose telephone number is (571) 272-3920. The examiner can normally be reached on 9:30 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kyung H Shin
Patent Examiner
Art Unit 2143

Kyung Hye Shin

KHS
May 14, 2007